



Implementation failure of the forest expansion policy in Flanders (Northern Belgium) and the policy learning potential

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ARTICLE INFO

Article history:

Received 7 September 2007

Received in revised form 30 May 2008

Accepted 16 July 2008

Keywords:

Single-loop learning

Double-loop learning

Advocacy coalition framework

Implementation analysis and policy failure

ABSTRACT

The current study is an illustrative example of intersectoral land conflicts in a highly populated region that resulted in the non-implementation of an already agreed-upon policy. More specifically, it evaluates the implementation of the forest expansion policy in Flanders (Northern Belgium) and assesses the potential to adjust current policy. The policy implementation analysis based on the variables checklist of the new top down models points out that the forest expansion program is not successful. This is mainly due to inconsistencies within the objectives and grant schemes used in agriculture and nature conservation policy and local resistance of the agricultural sector. The Advocacy Coalition Framework was used to examine the potential to adjust current policy. For the legislative changes, no adjustments were possible because two persistent coalitions, 'continuity-oriented' and 'change-oriented', with polarized core beliefs exist. The existence of these coalitions also emerged from a Detrended Correspondence Analysis of the binary table of all questioned topics. In contrast with the legislative changes, adjustment of forest grants would be possible. Hence, only less complicated policy adjustments seem possible for the Flemish forest expansion policy, and the outlook of this policy appears bleak.

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1. Introduction

Political and societal demand for forest conservation and afforestation are omnipresent, especially in densely populated and sparsely forested regions such as Flanders (Northern Belgium), Randstad (the Netherlands), Copenhagen (Denmark), and Paris (France) (Konijnendijk, 1999). In Flanders, only 10.8% of the land area is covered with forest (i.e., ~146,000 ha of forested land) (Waterinckx and Roelandt, 2001); therefore, the need for forest expansion in Flanders is recognized in many policy plans (e.g., Long-term Forestry plan,¹ Spatial Structure Plan Flanders²). Both plans confirm the policy goal of 10,000 ha forest expansion between 1994 and 2007 or an increase of 7% in the forest area. This expansion goal is not unrealistic for a highly populated region. For example, the National Forest region in the Midlands of England (500 km²,

population density of approximately 400 inhabitants/km²) increased its forest area from around 6% of the land area to more than 16% between 1991 and 2005 (Williams, 2006).

Since private owners control ~70% of the Flemish non-built-up land (forests and agricultural land), the expansion of forests strongly depends on co-operation with these individuals. To encourage landowners to implement the government policy of forest expansion and forest conservation, policy-makers are using a wide range of regulatory, economic, and informational instruments (sensu Vedung, 1998). The policy instruments that have been used in Flanders are grants and income compensation (as financial instruments) and restrictions on deforestation (as regulative instruments). In spite of the implementation of these instruments, the forest area declined by about 3700 ha during the period 1994–2000 (www.bosengroen.be 09/28/2006). In the subsequent time period (2000–2005), further decrease of the forest area was reversed to a small yearly increase of 79 ha compared to the forest area present in 2000 (Dumortier et al., 2005). However, at this rate, the policy goal of 10,000 ha net forest expansion would take 127 years to be reached (Dumortier et al., 2005)!

A possible explanation for the failure of the forest expansion policy is its inadequate implementation (Mendes, 2006). Furthermore, when implementation fails, it is important that a support base exists to improve implementation in the near future. Therefore, this study aims to investigate the implementation of and the potential to adjust the

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¹ Regional forestry plan in Flanders. There is no national forestry plan because forest policy is a regional competence in Belgium.

² A structure plan is a policy document that specifies the framework of the desired spatial structure. It gives the long-term outlook on the spatial development of the area in question. Its aim is to give more coherence to the structure planning process (preparation, assessment, and implementation). A structure plan can be compared with a master plan for spatial planning on the level of the region of Flanders.

Flemish forest expansion policy. In the next section, we will discuss the theoretical framework that is needed for both steps.

2. Theoretical framework

2.1. Policy implementation

Although many definitions of policy implementation exist, there is a reasonable consensus of the general meaning of the term (Berman, 1978). Goggin et al. (1990), Winter (1990), and Hasenfeld and Brock (1991) all emphasize that implementation is *a process in which decisions or actions are directed towards putting policies into effect*. The single most important fault line in the implementation literature is the division between a top-down view (e.g., Van Meter and Van Horn, 1975; Mazmanian and Sabatier, 1983; Linder and Peters, 1987) and a bottom-up view (e.g., Berman, 1978; Hanf, 1978; Elmore, 1979; Lipsky, 1978; Hjern and Porter, 1981). A top-down approach begins with the authoritative policy decision at the central (top) level of the government and proceeds downwards through the hierarchical administrative structure in order to examine the extent to which the policy's legally-mandated objectives were achieved and procedures followed (Sabatier, 1986; Najam, 1995). For “bottom-uppers”, the analysis should focus on the street-level bureaucrats, the real implementers of the policy (Lipsky, 1980). The bottom-up approach starts with an analysis of the many actors that interact at the operational (local) level and works backwards to map the outcomes and the impacts of the policy in terms of strategies adopted by the relevant actors in response to the particular policy choice (Najam, 1995). A limited number of attempts have been made to combine these two major perspectives on implementation (Matland, 1995). Examples are Elmore's concept of forward and backward mapping (Elmore, 1985) and the communication model of intergovernmental policy implementation (Goggin et al., 1990). The first is not a theoretical model in the traditional sense, but gives a useful suggestion for policy designers (Matland, 1995): policy designers should start with the consideration of policy instruments and available resources for policy change (forward mapping) and then they should identify the incentive structure of implementers and target groups (backward mapping) (Püzl and Treib, 2007). Goggin's model is based on the idea that implementers are political actors in their own right and that the outcome of this endeavour entails complicated negotiation processes between implementers and central authorities (Püzl and Treib, 2007). Parsons (1995) pointed out that some of the differences between the approaches are so fundamental that the effort to seek a comprehensive synthesis of both approaches is like trying to combine incommensurate paradigms. Therefore, Matland (1995) found it more fruitful to develop a model, based on policy types, that explains when the two approaches are most appropriate (Table 1). The policy types are differentiated by conflict and ambiguity. Policy conflict will exist when more than one organisa-

tion sees a policy as directly relevant to its interests and when the organisations have incongruous views. Ambiguity arises from ambiguity in goals, often a prerequisite for getting new policies passed at the legitimization stage, and ambiguity in means, the uncertainties of the role of organisations in the implementation process (Matland, 1995). Thus, the four different policy types make certain types of implementation more likely than others (Püzl and Treib, 2007). Each implementation type has its own preferred model type(s) (top-down, new top-down, bottom-up, or a combination), which mostly consists of a set of explanatory variables that more likely than other possible variables to explain the investigated implementation process.

In Flanders, the goal ambiguity is very low. The forest expansion target of 10,000 ha between 1994 and 2007 was first mentioned in the policy letter of the Flemish Minister of Environment in 1995. This target is repeated in the Spatial Structure Plan Flanders in 1997, the Environmental Policy Plans of 1999–2004 and 2004–2009, the governmental policy statement of 1999–2004 and 2004–2009, and the Environment and Nature policy documents of 1999–2004 and 2004–2009. There are no official documents that counteract this forest expansion target. The ambiguity in means is also low but there is a trend towards a larger goal realisation through the private sector. In contrast, the conflict level is high due to an incompatibility of the objectives of the nature (increase of 38,000 ha), forest, and agriculture policy (reconfirmation of 750,000 ha). In order to create nature and forest, agricultural land will be needed. In the Spatial Structure Plan Flanders, the expectation was a decrease of 56,000 ha (for nature, forest, and industry); however, in the period 1996–2004, the land area for agriculture use increased by 2.9% (according to the National statistic unit), or by 3.9% (according to the Manure bank), or by 4.1% (according to the Farmers union) (oral comm. farmers union). This evolution led to conflicts with the agriculture sector (oral comm. Flemish forest organisation and farmers union). According to the framework of Matland (1995), the forest expansion policy is an example of political implementation (low ambiguity and high conflict) and, thus, the cluster of explanatory variables of the new top-down models (i.e., technical and political factors) are the most fruitful for analysing the implementation process. This cluster of variables will be used as a checklist to investigate the Flemish forest expansion policy implementation and will be confined to the technical factors of Mendes (2006) and the political factors of Mazmanian and Sabatier (1989), together with the local political support of this policy. This local support is more of a bottom-up factor, but was included because the municipalities also influence the implementation of the forest expansion policy in Flanders. Mazmanian and Sabatier (1989) describe the following political factors: general public support, support from upper-level political leaders, resources and support from relevant constituency groups, and the commitment of implementing officials. Mendes (2006) gives a good overview of the technical factors:

- (a) *technical constraints* are budget constraints, normative constraints (e.g., legal regulations), the availability of material resources, human resources, communication, relevant knowledge, and the relationships among policy instruments and between policy instruments and policy targets;
- (b) *Stakeholder-related constraints* are individual rationality constraints (stakeholder must be better-off through the program) and incentive compatibility constraints (stakeholders' behaviour must be compatible with program target).

2.2. Policy learning

Adaptive and generative changes require organizational or policy learning and achieving this objective is largely a function of implementation evaluation (Rist and Joyce, 1995). Sabatier (1993) defines policy learning as “a relatively enduring alteration of thought or behavioural intentions that are concerned with the attainment (or

Table 1
Ambiguity–conflict matrix of Matland (1995) indicating the implementation type and the preferred model type (top-down, new top down, bottom-up, or a combination)

		Conflict	
		Low	High
Ambiguity	Low	Administrative implementation: outcomes are determined by resources, analysed with traditional top-down models	Political implementation: outcomes are decided by power, analysed with newer top-down models that include political factors
	High	Experimental implementation: contextual conditions dominate the process, analysed with bottom-up models	Symbolic implementation: local level coalitional strength determines outcome, analysed with bottom-up and top-down models

revision) of the precepts of a policy core belief system". Kemp and Weehuizen (2005) distinguish three types of policy learning: technical learning (about instruments), conceptual learning (about goals and strategies), and social learning (about societal values, responsibilities, appropriate ways of interacting, and policy approaches). Technical learning is an example of single-loop learning, learning that does not question the fundamental design, goals, and activities of the organization (Argyris, 1976). Conceptual and social learning are instances of double-loop learning. Double loop learning usually requires a crisis or revolution because organizational actors (e.g., administrations and agencies) are acculturated to be primarily single-loop learners (Argyris and Schön, 1978). The most important obstacles to policy learning are:

- Lack of time to do anything other than to cope with events (Chapman, 2002);
- An aversion to failure, exacerbated by the political process, which uses failure to score points rather than to learn lessons (Chapman, 2002);
- The dominance of turf wars and negotiations between departments, effectively making end-user performance secondary to other considerations (Chapman, 2002);
- Process predicament, the importance of procedures over outcomes. For example, the USDA Forest Service is so busy meeting procedural requirements that it has trouble fulfilling its historic mission (USDA, 2002).

Triggers to policy learning are:

- External system events like changes in socio-economic conditions, changes in public opinion, changes in systematic governing coalitions or policy decisions, and impacts from other subsystems (Sabatier and Jenkins-Smith, 1993);
- Changes in 'national mood' (Zahariadis, 1999);
- Crises and shock events (Haas, 1992; Zahariadis, 1999).

In order to study policy learning, Sabatier and Jenkins-Smith (1993) developed the Advocacy Coalition Framework (ACF). The main assumption of the ACF is that actors can be grouped together in two or more advocacy coalitions. These long-lasting coalitions are held together by complex belief systems. The belief systems can be described as a hierarchical, tripartite structure that includes the deep core: basic ontological and normative beliefs, which are very resistant to change (e.g., humans are part of nature versus dominant over nature), the stable policy core beliefs: basic normative commitments and causal perception across an entire policy domain or subsystem (e.g., the appropriate division of authority between government and markets), and the more dynamic secondary aspects (e.g., instrumental choices) (Sabatier, 1998). The ACF states that policy core beliefs of governmental programs will not change as long as the dominant coalition that instituted that policy remains in power (although the secondary aspects of those programs may well change) (Sabatier, 1998). In addition, it is possible to link Sabatier's belief systems with the different types of policy learning. The deep core beliefs are very stable and long-lasting and, therefore, no learning is possible. The policy core beliefs are stable, but eventually changeable with double-loop learning. The secondary aspects are dynamic and single-loop learning is sufficient to change them. Thus, when only single-loop learning is possible, this can be an indication of advocacy coalitions with different core beliefs. It is then also important to know which actors are members of these coalitions and how their membership can be explained.

3. Research methods

3.1. Implementation analysis

Information sources for the implementation analysis were policy plans ($n=5$), legislation ($n=5$), policy evaluations ($n=3$), doctoral

dissertations ($n=2$), EU-regulations ($n=2$), policy documents and letters ($n=7$) (see Appendix A) and in-depth semi structured interviews ($n=26$). The interviews were held with key actors from political parties, administrations, interest groups, experts, and environmental non-governmental organizations ($n=26$; see Table 2). The interviews addressed the support base for forest expansion ("Is forest expansion needed in Flanders?" and "Under which circumstances forest expansion is possible?") and the failure of the forest expansion policy ("What are according too you the main reasons that the forest expansion targets were not reached?"). The answers on these questions were clarified with some additional questions, but these could differ between the interviews. The selection of interviewee(s) within the organisation was based on document analysis; only persons with a specific interest in this forest expansion policy field were selected (e.g., the representatives of the political parties must be members of the parliamentary commission of Environment, Nature, Agriculture, Fishery, Countryside Planning, Spatial Planning and Real Inheritance). In large organisations such as the Forest service,

Table 2

Lists of the interviewed political organizations (cat. 1), administrations (cat. 2), organizations of the civil society (cat. 3), and experts (cat. 4)

Acronym	Name of organization or party or knowledge field	Translation	Cat.
ANB	Hoofdbestuur Agentschap voor natuur en bos	Nature and Forest Agency (head office)	2
ARP	Afdeling Ruimtelijke Planning	Spatial planning administration of the Flemish Region	2
BB	Boerenbond	Farmers union	3
BL	Bebossing van landbouwgronden	Nature and Forest Agency—agricultural land afforestation team (2 persons)	2
BUT	Bosuitbreidingsteam	Forest expansion team (2 persons)	2
CD&V	Christen Democratisch & Vlaams	Christian Democratic party	1
CE	Kabinet van Leefmilieu	Cabinet of Environment (advisor of the Minister of Environment)	1
EFN	Inverde	Educative forest and nature centre ^a	3
Exf		Expert forest expansion	4
Exl		Expert legislation	4
Exps		Expert public support	4
Exsp		Expert spatial planning	4
FG	Bosgroepen	Forest groups ^b (3 persons)	3
Groen!	Groene partij	Green party	1
LV	Landelijk Vlaanderen	Flemish forest and land owners' association	3
MINA	Milieu en Natuurraad Vlaanderen	Flemish Nature and Environmental Council	3
NARA	Natuurrapport team van het Instituut van Natuur- en Bosonderzoek	Nature evaluation team of the Nature and Forest Research Institute	2
NP	Natuurpunt	Main nature conservation organization in Flanders	3
NVA	Nationale Vlaamse Alliantie	National Flemish Alliance	1
SP.a	Sociaal progressief alternatief	Socialist–Progressive party	1
VB	Vlaams Belang	Flemish Nationalist party	1
VBV	Vereniging voor Bos in Vlaanderen	Flemish Forest organization	3
VHB	Vlaamse Hoge Bosraad	Flemish Forest Council	3
VLD	Vlaamse Liberalen en Democraten	Liberal party	1
VLM	Vlaamse landmaatschappij	Flemish Land Agency	2

^a Inverde is the main education center regarding forest, nature, and green areas. It focuses on the education of those interested in forest, nature, and green areas (i.e., forest owners and volunteers) and continuous on-the-job learning of professionals active in forest, nature, and green areas. One of the tasks of Inverde is to translate research results into education packages suitable for forest owners as well as employees of the Forest Agency.

^b Within forest groups, private and local public forest owners co-operate to develop a more effective management of their forests. The forest groups are the main actors for management advice and support for private forest owners.

different departments were questioned (e.g., the head office, the forest expansion team, and the agricultural land afforestation team). In order to reduce the possibility that interviewees do not represent their organisation's or department's ideas, the following procedure was used. Prior to the interview, it was emphasized by e-mail and telephone that the aim of the interview was to get the view of their organisation or department. They also received the topic list in advance so that a discussion was possible within the organisation before the interview. At the beginning of the interview, the importance of the organisation's view was again emphasized. After the interview, if needed, respondents received the complete transcript to check within their organisation. The interview transcript was also cross-checked with organisation documents. All of this material was coded and analysed according to the mentioned explanatory variables of our analytical framework. The sources will be mentioned for normative statements only.

3.2. Policy learning

The in-depth interviews also addressed the policy learning topics: adjustment of the forest grants (as an example of single-loop learning) and juridical adjustments to the Tenure law and the Field code (double-loop learning). The chosen subjects are very important implementation gaps (see Results) and for each subject the respondents' opinion about a proposed adjustment was questioned (e.g. Can you agree with a tenure law change to make afforestation of agricultural land more easy; and under which circumstances (only for forest expansion areas)?). All of the interviews were tape-recorded, transcribed, and analysed using NVivo, a computer-assisted qualitative data analysis software. To facilitate the coding of the transcript, a tree node structure was developed (see Appendix B). In the result section, the individual respondents will be mentioned for normative statements only.

In order to define the different policy coalitions for forest expansion on a more objective base and as an internal consistency check, we used the ordination method 'Detrended Correspondence Analysis' (DCA) (Hill and Gauch, 1980). Calculations were made using the PC-ORD program (McCune and Mefford, 1999) and each question was equally weighted. Our main matrix was a binary table of all questioned topics (the nodes of the tree), which consists of 26 respondents, 4 answers divided in pro, contra, and conditional, and 3 single questions (i.e., a 26*15 binary matrix). The resulting ordination was interpreted on the basis of the interviews and documents. Unexpected ordination results were cross-checked with the respondents.

4. Results

4.1. Implementation analysis

In the next sections, we will discuss the implementation topics: political factors, technical constraints (communication and instrument–instrument matching), and stakeholder-related constraints (individual rationality constraints).

4.1.1. Political factors

In our analyses, it was difficult to make a clear distinction between the support from upper-level political leaders (the political parties and the cabinet) and the support of their relevant constituency groups (Farmers union, Nature NGO, Flemish forest organisation, Forest groups, the councils, and Educative forest and nature centre). These groups are highly related; therefore, the analysis was done for both groups together.

Both groups are positive with respect to forest expansion in general. The majority refers to the binding regulations of the Spatial Structure Plan Flanders (10,000 ha forest expansion). According to the interviewees, the reasons for this forest expansion are biodiversity, the

need for recreation in our overstrained society or in urban regions, the multifunctional use of forests, hunting, and the buffer function of forests. This forest expansion may, however, interact negatively with the beauty of the existing landscape or cause insuperable difficulties for other sectors. Thus, all other sectors want to maintain their existing power position. They also have some instruments to keep this position at the expense of the forest expansion policy. For an afforestation project in nature designation zones, protected nature areas, or protected landscapes, advice or a permit from the Nature Agency and the landscape administration, respectively, is needed. For an afforestation project in agricultural designation zones, a permit from the Land Agency and the higher forest official is needed. The policy objectives of the nature, landscape, or land administration may, at times, differ from those of the forest administration; therefore, these permits can also counteract the forest expansion policy.

Even more important are the influence of the local political leaders (bench of the mayor and aldermen) and the strong influence of the agricultural sector on these leaders. In agricultural designation zones, the local municipalities must deliver afforestation permits before afforestation can take place (Field code article 35 bis Section 5). The aim of this federal legislation was to give municipalities the opportunity to act against active afforestation in agricultural areas in the scope of good neighbourliness. Within the current spatial planning, this legislation is out-of-date and the aims are less relevant. This permit is also obliged for the higher authorities and their administrations (such as the Forest Agency). It is strange that a federal act and a local authority can give restrictions to regional matters like forestry, spatial planning, and nature conservation. At the moment, the provision of the afforestation permit is sometimes misused by local politicians to hinder decisions of the Flemish government or for favouritism. Thus, local politicians have a strong influence on the policy implementation. Fortunately for the Forest Agency, there exists one backdoor in this law: the permit is not needed for spontaneous forest development.

4.1.2. Technical factor: communication

Here, we distinguish between two types of communication: (1) communication of the existence of the grant schemes and (2) communication to the broader public.

A Flemish study on the attitude of private forest owners (Serbruyns et al., 2001) revealed that only 40.3% of the small forest owners (<5 ha) had knowledge of the existence of grants for afforestation and only 42.5% of them were aware of subsidies for reforestation. The result for the larger owners (>5 ha) was somewhat better with 63.4% of the owners knowing about the existence of the afforestation subsidy and 68.0% about the reforestation subsidy.

General communication is an important spearhead for acquiring a broad social support base for forest expansion. At the moment, this communication is discontinuous, strong at the preparatory phase and the realization phase but almost absent in the in-between period. The communication at the preparatory phase creates expectations with the broader public that can almost never be fulfilled immediately. As a result, the support base of the project will decrease because people do not believe that the forest will ever be planted. Another problem is that the official communication is too specialized (source: Muys et al., unpublished). It does not sufficiently use local knowledge or discuss the esthetical and ethical aspects of forests. The perceptions of the target groups about the forest and the forest discourse are also not known. These perceptions differ from the academic perceptions of the forest administration.

4.1.3. Technical factor: instrument–instrument matching

There is one important inconsistency between the forest expansion policy and the agriculture policy: the Tenure law. The Tenure law is one of the most important obstacles for afforestation. In Flanders, 65% of the agriculture area is leased (Gotzen, 1997). The Tenure law

does not allow the termination of tenure for afforestation unless it is granted by the court of peace,³ after having heard the local agricultural expert (article 10). In addition, the tenant cannot afforest without a written agreement with the leaseholder (article 28). Articles 6 and 7 allow public authorities (not the leaseholder) to terminate the tenure for public benefit or objectives of general importance (such as forest expansion) through expropriation. When terminating the tenure, the administration must wait at least three months (legal notice for tenure cancellation), with a maximum wait of nine years and three months (the right of the tenant to fulfil the ongoing period), before afforestation can take place (article 11, 1°). In reality, the Forest Agency works within a compromise model so that the negative consequences for the tenant are limited. This practice is positive for the political and public support base, but this method will not be satisfactory for reaching the policy goal of 10,000 ha of supplementary forests as soon as possible because the target year (2007) has already passed.

4.1.4. Stakeholder-related constraints

The financial support of the Flemish government is too low to convince farmers and other private landowners to afforest their land (Meiresonne, 2001). Income support is only paid for five years for afforestations with poplar, conifers, and non-indigenous broad-leaved species. For farmers, this period is too short for income-security and agricultural grants are too competitive. Even more, Flemish farmers are rather opposed to afforestation (even classic poplar cultivation); only 13% of the Flemish farmers take this opportunity. Possible explanations are the insecurity concerning 'land designation', fear of a decreasing value of the land, strong beliefs that a reconversion to agricultural land will be legally impossible with time, fear of game damage to their agricultural crops, and the 'long' rotation time (15 to 20 years for poplar) (Meiresonne, 2001). On the other hand, they seem interested in short rotation forestry for energy purposes.

4.2. Policy learning

In the next sections, the possibility of policy learning is discussed. First, we will discuss the possibility of single-loop learning (e.g., adjustments of forest grants) and, then, of double-loop learning (e.g., support for legislative changes of the Tenure law and the Field code).

4.2.1. Single-loop learning

One of the implementation failures of the forest expansion policy program is that the financial support to the farmers and other private landowners is too low. This is the case for the initial grant and for the later yearly payment in return for the delivering of public goods. A possible improvement would be equal treatment in terms of the financial support for forestry and agriculture, whereby the support for forestry would increase. Almost one-third of the interviewees (exsp, LV, SP.a, EFN, NP, VBV, BUT, MINA) support this idea. The other interviewees neither reject nor support it. A further improvement would be to make the afforestation grant system area-specific; for example, higher grants in forest expansion areas than in agricultural designation zones. There would also be a need for a closed system without the possibility of misuse. Given the views of several respondents, instrumental learning seems possible. However, an increase in the grant amount will probably not be crucial for the effectiveness of the forest expansion policy. Hence, higher order learning seems needed.

4.2.2. Double-loop learning

The most important changes at the level of double-loop learning are an adjustment of the Tenure law and the Field code. When these

laws remain unchanged, the possibility for single-loop learning, as mentioned in the above, seems useless.

The Social and the Liberal parties have tried to add an enactment of the **Tenure law** so that the tenure can be terminated by the landowner for reasons of afforestation (article 7), but both failed. One of the problems is that the Tenure law is federal competence⁴ so it was thought to be impossible to change by a Flemish decree. However, the Tenure law has recently (2005) been amended by the Flemish Surface Mineral decree⁵ on the Flemish level. Hence, what is possible for private interest should also be possible for public interest (afforestation). A second problem is that the Tenure law is a 'sacred cow' for the agriculture sector. Today, this sector is under great pressure, but the lobby seems stronger than ever. The social cohesion of the farmers against afforestation is also important. Under the previous legislature with the Green (Groen!) and Liberal parties (VLD), the change of the Tenure law did not go through. A possible explanation is that the VLD was trying to convince farmers to vote for the VLD and a change of the Tenure law would certainly not contribute to the success of this objective. Under the present legislature with the Christian Democratic party (CD&V) in the government, it will be politically impossible because of the strong link between this party and the agricultural sector. Nonetheless, some interviewees (NP, ANB, exsp, exf) expect a few changes in the near future because the use of the open space by the agricultural sector is less accepted by the public and farmers realise that extensification and new forms of agriculture (i.e., farm tourism) will become important. Thus, the support of farmers for a change of this Tenure law is increasing. At the moment, many interviewees are advocates of a modification of the Tenure law (VBV, NP, exsp, EFN, ANB, exf) or an integral revision of this law (Groen!, exsp). In order to increase the political feasibility, the cancellation clause for afforestation can be linked to certain spatial designation zones (the green designation zones and the afforestation designation zone). For the farmers union (BB) and the CD&V, this indulgence is unsatisfactory and the existing Tenure law must be preserved. On the other hand, the afforestation cancellation possibility must be controlled for misuse. The enactment of the Tenure law should be accompanied with soft instruments such as communication and participation as well as hard economical instruments. Small parcels of new woodland must be avoided by fitting individual afforestations in larger forest expansion objectives.

Almost half of the interviewees are advocates for an abolition of the afforestation permit of the Field code (SP.a, exsp, EFN, exf, exsp, FG, exl, VHB, NP, VLD, ANB, Groen!). The fact that the local authorities, often with strong links with agricultural coalitions, must supply a permit can generate a serious hindrance for afforestation and forest expansion. It is also patronizing that owners must ask for a permit for afforestation. A regrettable trend is the misuse of the permit obligation to block Flemish policy objectives on the local level or to fight out political tribe disputes. The drawback of the abolition of article 35 bis, however, is that it will become impossible to afforest in agricultural designation zones. The farmers union (BB) is explicitly in favour of an agricultural area without woodlands. The Christian Democratic (CD&V) and the National Flemish parties (VB) want to retain this local autonomy. The Cabinet of the Minister of Environment (CE) expects that the local authorities respect the spatial decision of the higher political level and that the municipalities keep their own decision within this framework.

Given the above views and considerations, it seems that double-loop learning is not possible. A possible explanation is that there exist different, opposing, and stable policy coalitions. This was further

³ The justice of the peace is the most attainable magistrate in Belgium. When someone comes in contact with the court, it is primarily the justice of the peace. The competence of the justice of peace is broad; almost all aspects of daily life are included.

⁴ Belgium has an interrupted federalisation process. Some competences such as international trade and agriculture were first federal competence and are now shared among federal and regional levels.

⁵ The amendment made it possible to cancel the tenure in order to exploit soil minerals. Both the landowner and the exploiter can cancel the tenure.

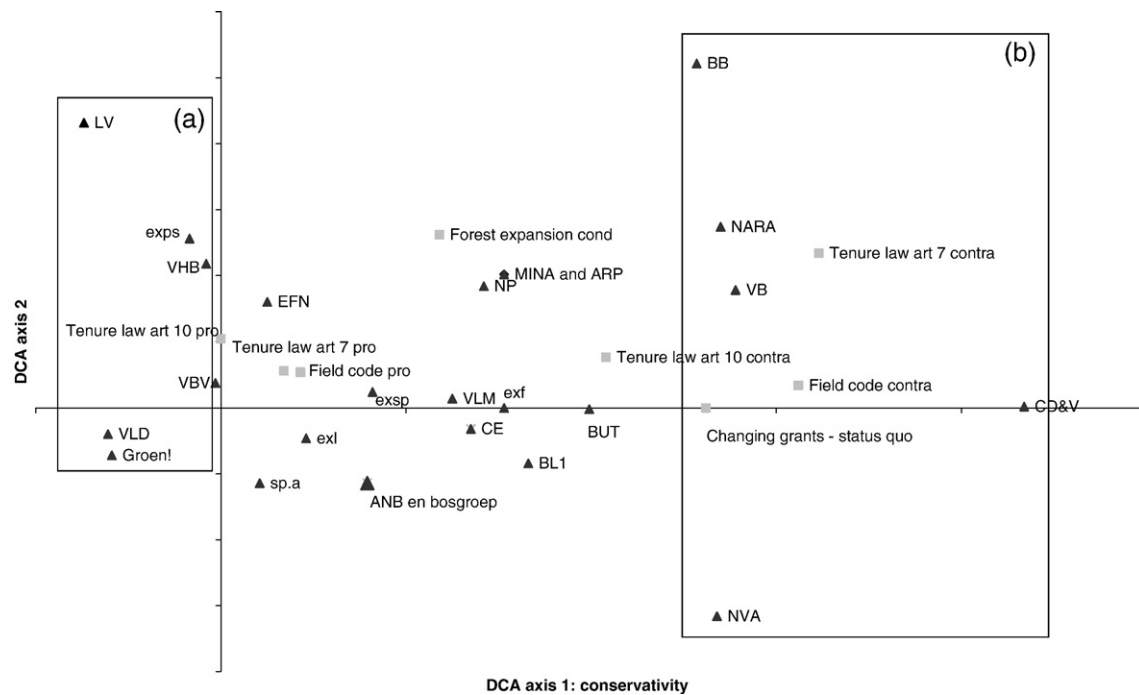


Fig. 1. Scatterplot of the first two axes resulting from a Detrended Correspondence Analysis (DCA) of the results from the in-depth interviews on the Flemish afforestation policy; (a) progressive group (policy learning is possible to accelerate the forest expansion policy) and (b) conservative group.

investigated with Detrended Correspondence Analysis (DCA), for which the result is shown in Fig. 1. The first DCA axis explained 36.8% of the variance and the second 11.3%. The first axis can be interpreted as a gradient in willingness to conserve the existing situation of forest extension policy and divides the respondents into three groups: the 'continuity-oriented', the 'neutrals', and the 'change group' (see Fig. 1). The topics 'contra-changing articles 7 and 10 of the Tenure law', 'contra-abolition of the Field code', and the status quo of the forest grants are positively associated with this axis. Members of the continuity-oriented group are the Christian Democratic party (CD&V), the Flemish Nationalist party (VB), the National Flemish alliance (NVA), farmers union (BB), and, surprisingly, the Nature evaluation team (NARA). The unexpected position of NARA can be explained by their contra position of the Field code. The change-oriented coalition exists of the Green party (Groen!), the Flemish forest and landowners' association (LV), the Flemish Forest Organisation (VBV), the Flemish forest council (VHB), and the Liberal party (VLD). The other respondents are neutral.

Through the disputed beliefs of both groups at the extremes of the continuum there is no (positive) evolution in forest extension policy possible at the moment. Important core beliefs to explain the position of the different respondents in the DCA are:

- the protection of the farmer (BB, CD&V) and, thus, a contra position for the Tenure law change;
- local autonomy of municipalities (CD&V, NVA) and, thus, a contra position for the abolition of the Field code;
- belief in the free choice of the landowner (VLD, LV) and, thus, a pro position for the Tenure law change and the abolition of the Field code;
- belief in the need for forest expansion (SPa, exps, EFN, exf, exsp, FG, exl, VHB, NP, VLD, ANB, Groen!) and, thus, a pro position for the Tenure law change and the abolition of the Field code;
- an agricultural area without forests (BB) and, thus, a pro abolition of the Field code. The Farmers union (BB) believes that this is a needed change in order to realise the complete separation of agriculture and forest.

5. Discussion and conclusion

5.1. Implementation analysis

The major implementation failures for forest expansion given by this analysis are (1) the local resistance of farmers, (2) the influence of the relevant constituency groups (i.e., farmers) on the political leaders (upper-level and local), (3) imperfect communication, (4) inconsistencies with the agricultural and nature legislation, and (5) too low financial support of farmers. Many of the failures are a result of the secondary position that forest policy holds relative to agriculture policy and the use of separate sectoral visions instead of an integrated rural vision.

The secondary position of forestry is common in many countries (e.g., USA) and organisations (i.e., FAO); forestry is commonly a part of the larger agriculture department. Also, in the EU, forestry is only one of the measures within the Common Agriculture Policy (CAP). Possible explanations of this secondary position are that many actors do not have enough knowledge to understand the importance of forest expansion, that their interest in forestry as economic activity is low, and that the ranking of land use alternatives are primarily based on their contribution towards economic growth (increase of GDP). Examples of this can be seen in promoting agriculture over biodiversity conservation (Young et al., 2005), soil conservation (Penning-Rowsell, 1997), and afforestation and mining over current land use projects (Hilson, 2002).

The high price support given to the farmers keeps unproductive land in production. A decrease of this support can increase afforestation of this land (Plantinga, 1996). This is especially true in combination with high afforestation grants (Wiersum, 1996; Williams, 2006) and early adopters, who reduce the distrust among other farmers by showing advantages and possible problems of this 'new' system (Konijnendijk and van Laar, 1996) and increase the forest-related knowledge of farmers. There must be also a local appreciation of these 'new' forests. In regions with a limited forest tradition, this appreciation was low (Elands and O'Leary, 2002). One of the reasons for this is that the forests are sometimes developed by outsiders and the locals feel that they lose control over their own community.

Given the specific federal structure of the state of Belgium, the question is whether it is possible to generalise the findings. We do think that generalisations can be made because, through the ongoing decentralisation process, most unitary states have municipalities as decentralised units (Work, 2002). The consequence of this decentralisation process is that, in practice, the line between federalism, unitary states, and centralised systems becomes blurred (Work, 2002). This decentralisation can also lead to increased political conflict and dispute between all levels of government (Giordano and Roller, 2003). Thus, the tug-of-war that goes on between multiple levels of government, as was found in this research, will be not unique for this case.

5.2. Policy learning

The analysis indicates that as long as the dominant coalition that instituted a specific policy remains in power, only single-loop learning will be possible. This is in line with Argyris and Schön (1978) that policy-makers primarily accepted only small adjustments of their policy and with Sabatier (1998) that policy programs will be stable when the dominant coalition stays in charge. This stability was already proven by many authors; for example, for forest certification in Indonesia (Elliott and Schlaepfer, 2001), the ecological amendment of the German federal forest act (Winkel and Memmler, 2004), and the convention on climate change in the USA (Sewell, 1996).

Thus, in order to turn this policy into the status quo and improve the forest expansion policy, a crises or organisational revolution will be needed, whereby the power distribution between both coalitions is positively changed towards the change-oriented coalition. However, the dominant coalition (the continuity-oriented) is characterized by a strong social cohesion between farmers, farmers' organisations, and CD&V. This strong social cohesion between individual farmers is confirmed by Knierim et al. (2003). This powerful group will also have a strong interest in keeping policies and government programmes operating within their current 'sectoral' boundaries because this will increase their influence (Gouldson and Murphy, 1996). This is especially true because the agricultural sector is under pressure to change to more environmentally-friendly practices, which reduce the chance for policy learning (Maarleveld and Dangbégon, 1999). However, a change in the power distribution is not a guarantee that the changes that are needed are, indeed, realised. For example, in 1999–2004, there was a government coalition of the Liberal party (VLD), the Socialist party (SP.a), and the Green party (Groen!) and even then it was impossible to change the Tenure law and the Field code. Two different explanations are possible. First, in that legislative period, the VLD was trying to become a broad right-wing party and, thus, tried to convince farmers of their importance. Second, the progressive coalition consists of members who share the same objective (i.e. give the opportunity to private land owners to afforest their land) for different reasons while having different objectives on other 'nature' themes at the same time. In contrast, the continuity-oriented coalitions have more parallel objectives for all nature and forest themes. The research also confirms the two aforementioned conclusions of Chapman (2002) that the dominance of 'turf wars' between sectors is an important impeding factor for policy learning and the use of failure to score points rather than to learn lessons.

5.3. Conclusions

Summarising, the implementation analysis pointed out that the forest expansion program is not successful. This is mainly due to the secondary position that forest policy holds relative to agriculture policy and the focus on sectoral policies instead of an integral rural policy. On the theoretical level, the study confirms the usefulness of the implementation framework of Matland (1995). Even in a situation with a low ambiguity and a high conflict level, it is important to look not only to the traditional top-down implementation constraints, but

to also incorporate some bottom-up implementation constraints (i.e., support of local political leaders). Thus, this study also confirms the importance of the street-level bureaucrats of Lipsky (1980).

The policy learning analysis pointed out that for the legislative changes (i.e., a more complex policy change), adjustments of current policy do not seem possible because two persistent coalitions, the 'continuity-oriented' and 'change-oriented', with polarized policy core beliefs exist. In contrast with the legislative changes, policy learning is possible for the adjustment of forest grants. Thus, at this moment, only small adjustments are possible in the Flemish forest policy subsystem. This confirms the statement of Argyris and Schön (1978) that policy-makers primarily accept only small adjustments of their policy. In the absence of more complex policy changes, the outlook of the forest expansion policy remains unfavourable. Other confirmed policy learning statements are the ACF-hypothesis of stability of disputed core beliefs groups, the importance of turf wars, and the aversion to failure.

Appendix A. The information sources for the implementation analysis

Policy plans

- Long-term Forestry plan (1998–2017)
- Forestry Action plan (1998–2003)
- Spatial structure plan Flanders (1997)
- Environment policy plans (1997–2002; 2003–2007)

Legislation

- Forest decree (including implementation orders)
- Nature decree
- Landscape decree
- Field code
- Tenure law

Policy evaluations

- Nature evaluation report (2003, 2005)
- documents of the ad hoc working group on forest expansion of the Flemish Forest Council

Doctoral dissertations

- Bogaert (2004) and Van Herzele (2005)

EU-regulations

- EG regulations 2080/92 and 1257/99 on community aid scheme for forestry measures in agriculture regulation and on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations.

Policy documents and letters

- documents of the co-operation agreements between the Flemish and local governments
- documents of the forest expansion team of the Flemish Forest Agency
- policy documents and policy letters of the Flemish ministers responsible for forest policy (1999–2004; 2004–2009)

Appendix B. The tree node structure

Legislation

Tenure Law

Article 7 (Pro, Contra, and Conditional)

Article 10 (Pro, Contra, and Conditional)

Field Code (Pro, Contra, and Conditional)

Forest expansion (Pro, Contra, and Conditional)

Forest grants (status quo, same level as agricultural grants, feasibility)

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